Minutes of the APSUO Steering Committee Meeting Held on January 25, 2001, at Argonne National Laboratory

Attendees:

M. Antonio, J. Budai, S. Dierker, P. Fenter, J. Galayda, D. Haeffner, S. Heald, E. Isaacs, D. Mills, D. Moncton, S. Muchmore, T. Rauchas, W. Schildkamp, G. Shenoy, B. Stephenson, S. Strasser, C. Vanni, and P. Zschack

Routine Business:

Minutes of the October 19, 2000, meeting were approved, and action items were reviewed.

APS Update and Reports:

APS update:

David Moncton reported on the current status of APS funding and reviewed recent efforts on the parts of the APS and the user community to support the President's budget. He also presented a historical look at APS funding, noting that the current funding situation (when adjusted for inflation) is essentially flat despite the continued vigorous growth of the user community.

Moncton highlighted several recent APS accomplishments and performance upgrade goals for FY 2002. Recent successes include R&D efforts to eliminate background radiation in the x-ray beam position monitors (the so-called "Decker distortion"), doubled scientific productivity as measured by publications in refereed journals, and successful top-up tests, among others. Top-up testing has been ramping up; by October 2001 the APS anticipates running a majority of the time in top-up mode. Additionally, Moncton presented data showing the dramatic improvements achieved in horizontal and vertical beam position stability. Further improvement in this operational parameter hinges on current work with x-ray feedback from the insertion devices. Moncton reminded the group that the APS plans to shift from four operating periods to three per year. FY 2002 will be a transition year into three operating periods, with a firm three-run cycle established by FY 2003.

The group discussed at length the importance of tracking publications arising from work conducted at the APS. This data is critical in establishing the APS as a facility that is producing valuable science. It was acknowledged that gathering data about publications is inherently difficult but must be pursued with much vigor. It is also important to ensure that researchers remember to include proper APS and CAT acknowledgments in their work.

Twenty-five out of 34 sectors at the APS have been allocated to CATs, with an additional six sectors in the queue including the following potential CATs: GM/CA (General Medicine/Cancer), HEX (High-energy X-ray Scattering), IXS (Inelastic X-ray Scattering), LS (Life Science), NANO (nanoscience and technology), and NE (Northeastern). Additionally, two other groups are submitting letters of intent. The new biological science CATs will be accommodated in the new LOM 436. (The contractor is beginning work on this new venture.)

Two new initiatives, the Fourth-generation Light Source and the Center for Nanoscale Materials were discussed. The APS is currently an active participant in the R&D efforts on the Linac Coherent Light Source project. Moncton presented some results from self-amplified spontaneous emission saturation tests done at the APS low-energy undulator test line facility. The scientific case for the nanoscience center has been submitted to DOE.

Communications:

Gopal Shenoy discussed the relative merits of several communication vehicles that have been used to convey information about science and progress at the APS to the outside world. These communication tools include published journal articles, APS Research, CAT Communicator, APS User News, Activity Report, and other possible publication formats. Shenoy also queried the group about the optimal media (electronic or paper) and frequency of distribution for these various publications. The group discussed the challenges of getting the user community to submit both scientific papers and information about published papers, as well as related issues (frequency of requests, conflicts between publishing in an APS publication and in a journal, and synchronizing the requests with CAT funding renewal cycles).

APS Independent Investigator (II) proposal submission and review process:

Susan Strasser reviewed the policy history of the II program, including the changes proposed at the October 2000 Research Directorate meeting. She presented the proposed dates for the uniform submission cycle. The group noted that the fixed schedule would not serve biological science users well as they are driven primarily by the timing of availability of their crystals. Strasser reminded the group that CATs still have flexibility within the proposal system to manage quick access cases as the CATs see fit. In addition to the uniform submission cycle, the group suggested possibly establishing uniform scheduling meetings to facilitate exchanging proposals between CATs to maximize use of beam time. It was suggested that IIs perhaps be allowed to designate when their requests for beam time should be assigned to "fast-track" consideration.

APS seminar series:

Denny Mills introduced the seminar series concept at the last meeting. The seminars will be held at lunchtime every Friday afternoon (except Laboratory holidays). Two half-hour presentations will be given at each meeting. Speakers will be selected from various sectors around the ring. Occasionally, accelerator staff may be asked to give updates on the machine. Attendees will have the option to order lunches.

Executive Session:

Preliminary planning: Eleventh Users Meeting for the APS:

A variety of ideas for 11UM were discussed.

- 1. List in the program book all of the graduate students (advisors and thesis titles, too) whose doctoral work included results obtained at the APS. Consider having a special section of the poster session to highlight these students.
- 2. Convert the APS 101 workshop to an evening session to free up time for workshops during the day.
- 3. Possible opening session keynote speakers: Hans Deisenhofer (currently at the APS as an Argonne fellow) or Cherry Murray (Lucent Technologies).
- 4. Potentially add a brief report in the opening session from the results of the detector workshop held in Washington D.C., co-sponsored by Denny Mills.

A tentative list of workshops was discussed. The ideas mentioned are summarized below:

Possible Workshop Topics	Potential Organizer(s)	Duration	Comments
APS 101		1/2 day	
Nanoscience	Brian Stephenson	Full day	Likely would be some overlap between nano sci and microbeam
Small-angle x-ray scattering	Gabriella Long	1/2 day	Focus on structure
Biological Science	?	Full day	?
In situ characterization	Mark Antonio	?	"real-world" kinds of analysis (e.g., diesel spray, fiber spinning, etc.)
Meso scale	Gene Ice	?	Things between single crystals and powders

Electronic election process:

A recent meeting (attended by Mark Antonio, Linda Carlson, Paul Fenter, Steve Muchmore, Susan Strasser, and Connie Vanni) was held to discuss the "e-voting" process at the next users meeting. A prototype e-election process was developed and a demonstration of the system is planned for the next APSUO meeting (April 2001).

User Meeting logistics:

Connie Vanni informed the group that a meeting has been scheduled to begin calculating per person costs to help estimate vendor and registration fees. Venues for the user meeting banquet are being considered.

Potential advocacy actions:

Eric Isaacs discussed the importance of raising the profile of the APS user community within the scientific community at large. Methods for accomplishing this could include more talks at conferences and symposia, more publications based on APS science, more recognition for members who achieve outstanding successes, etc. The group discussed how to motivate the user community to respond to these needs.

Isaacs advised that the APSUO wait for the new administration in Washington to settle down before planning future interactions. He noted that other synchrotron user organizations could potentially be contacted to develop a team approach for future initiatives in which the user community needs representation. The new Congress should be studied to determine what committees key state representatives are involved in.

Next Meeting:

The next meeting of the APSUO Steering Committee will be held Thursday, April 26, 2001.

APSUO SC 01/25/01 Meeting Action Items:

- 1. Add information to the II Web page about submitting papers (for publications database and activity report) and about proper APS acknowledgment statement. (S. Strasser)
- 2. Alter the II database to allow II administrators to see when their CAT is the second choice and to check the status of that proposal with respect to the first-choice CAT. (S. Strasser)
- 3. Consider having a new II proposal automatically kick over to the second-choice CAT if the first-choice CAT does not act on the proposal in a specified timeframe. (S. Strasser)
- 4. Send C. Vanni the names and contact information for any vendors recently used at the APS that have not been a part of recent user meetings. (all APSUO committee members)
- 5. Suggest organizers and topics for the user science presentations. (all APSUO committee members)
- 6. Send any suggestions for nominees to the APSUO SC to the nominating committee. (all APSUO committee members)
- 7. Send an e-mail to all CAT directors to solicit potential nominees for the APSUO SC. (the APSUO nominating committee)
- 8. Conduct a teleconference with other users' organization chairs to determine how their funding situations settled out. (E. Isaacs) Provide names and telephone numbers for the teleconference. (S. Strasser)